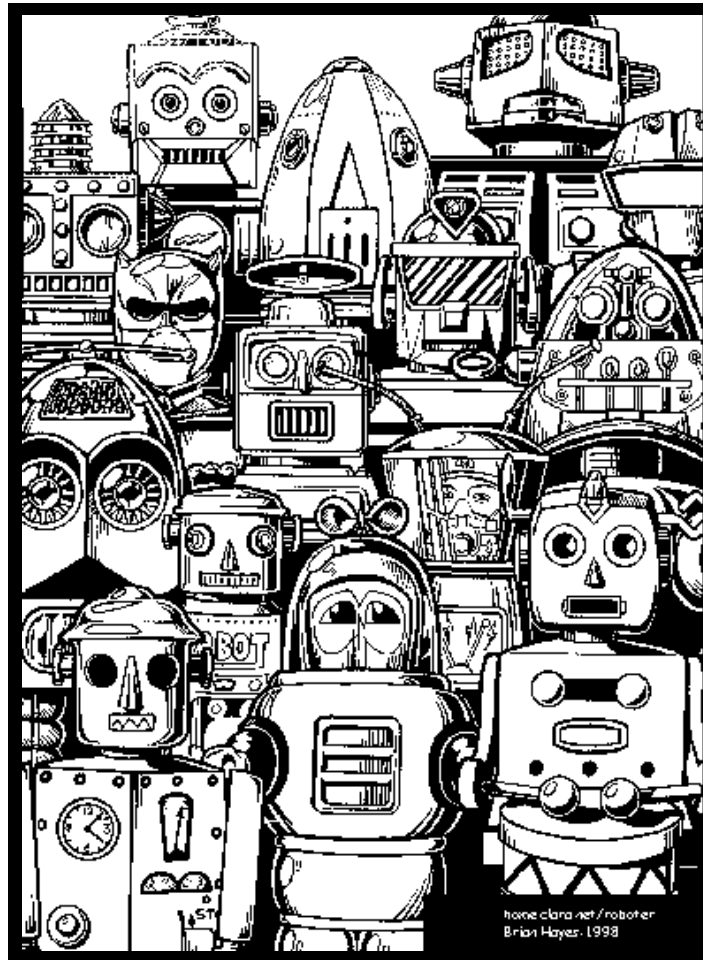


Robots and Robotics



Year 8 ICT Project

Introduction

Did you know.....?

- In 1962 General Motors installed the first industrial robot on a production line.
- In 1976 robot arms are used as Viking 1 and 2 space probes.
- By 1990 there were more than 40 Japanese companies, including giants like Hitachi and Mitsubishi, that were producing commercial robots.

As you will discover, a robot can take on many shapes and do a number of important tasks.

Have fun with this unit of work and enjoy learning about robots and robotics!

TASKS

For this project you will be expected to complete a number of different tasks concerned with the topic of 'Robots and Robotics'. Each task will require you to collect information by either watching videos, reading, or investigating web sites. You will then be required to sort and evaluate information and present it in various ways.

Remember! All printouts should be collected and saved together and kept in a folder and submitted for assessment at the end of the unit.

Task 1

Become a qualified Internet Explorer!!

There are millions of websites available on the Internet. It is very important that you are able to make decisions as to which are the best to use at the time when you are looking for information on a particular topic. Learning how to make these decisions is called **evaluation**.

QUICK: The Quality Iformation CheckList

QUICK is a website designed to show you how to evaluate web sites. It shows that there are eight ways of checking information on websites. These are:

Is it clear who has written the information?	Are the aims of the site clear?
Does the site achieve its aims?	Is the site relevant to me?
Can the information be checked?	When was the site produced?
Is the information biased in any way?	Does the site tell you about the choices open to you?

To complete this task you need to:

1. View the QUICK website (on the school server or at www.quick.org.uk/menu.htm)
2. Attempt the online Quiz at QUICK.
3. Evaluate at least two web sites given to you in class and complete evaluation forms.
4. Be ready for the Class Quiz.
5. Gain your 'Internet Explorer' certificate and put it in your folder.

Task 2

Learning about Robots and Robotics by viewing the latest designs and research on video.

Watch the video on Robots and Robotics in class and see many of the different robots in use around the world today. You will be surprised how many different and unusual robots there are!

Take your own notes in your ICT exercise books and then answer these focus questions:

1. List the different types of robots and ways that they are used in the world today.
2. How has Hollywood traditionally portrayed robots?
3. Describe two robots that you see on the video: Draw a sketch and discuss briefly why they were invented and what they are used for.
4. Copy this chart into your books and explain it. Also give examples:

Three Types of Robots	
Intelligent tele-operated systems	Humans make the decisions
Supervisory control	Humans make key decisions via a computer
Autonomous	Free of human control